IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

IPA TECHNOLOGIES INC.,

                Plaintiff,

v.

AMAZON.COM, INC., and AMAZON
DIGITAL SERVICES, LLC,

                Defendants.

Civil Action No. 1:16-cv-01266-RGA

███████████████████

PUBLIC VERSION

IPA'S OPPOSITION TO AMAZON'S MOTION FOR
SUMMARY JUDGMENT OF NON-INFRINGEMENT

Dated: July 30, 2021

Of Counsel:

Paul J. Skiermont
Sarah E. Spires
Steven W. Hartsell
Jaime K. Olin
Alexander E. Gasser
Sheetal Patel
Kevin P. Potere
Tara M. Williams
SKIERMONT DERBY LLP
1601 Elm Street, Suite 4400
Dallas, TX 75201
(214) 978-6600
IPA_SDTeam@skiermontderby.com

Mieke K. Malmberg
SKIERMONT DERBY LLP
800 Wilshire Blvd., Suite 1450
Los Angeles, CA 90017
(213) 788-4500
IPA_SDTeam@skiermontderby.com

BAYARD, P.A.

Stephen B. Brauerman (#4952)
Ronald P. Golden III (#6254)
600 North King Street, Suite 400
Wilmington, DE 19801
(302) 655-5000
sbrauerman@bayardlaw.com
rgolden@bayardlaw.com

Attorneys for Plaintiff,
IPA Technologies Inc.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES

RULES

TABLE OF EXHIBITS

Exhibits to Declaration of Jaime K. Olin in Support of IPA's Opposition to Amazon's Motion for Summary Judgment of Non-Infringement

Exhibit A	[Sealed] Opening Expert Report of Nenad Medvidovic, Ph.D. dated February 19, 2021
Exhibit B	[Sealed] Reply Expert Report of Nenad Medvidovic, Ph.D. dated May 7, 2021
Exhibit C	[Sealed] Rebuttal Expert Report of Katia P. Sycara, Ph.D. dated April 15, 2021
Exhibit D	[Sealed] Excerpts of Deposition Transcript of Kelly Vanee dated December 4, 2020
Exhibit E	The Java™ Tutorials – Managing Source and Class Files
Exhibit F	UML Diagram Types Guide: Learn About Types of UML Diagrams with Examples
Exhibit G	Extensible Markup Language (XML)
Exhibit H	Merriam-Webster's Learner's Dictionary – Format Definition
Exhibit I	Merriam-Webster's Learner's Dictionary – Language Definition
Exhibit J	PC.net – Definition of Registry
Exhibit K	Excerpts of the IBM Dictionary of Computing (10th Ed.)

Exhibits to Declaration of Min Wu in Support of Amazon's Motion for Summary Judgment of Non-Infringement

Exhibit 1	U.S. Patent No. 6,851,115
Exhibit 2	U.S. Patent No. 7,069,560
Exhibit 8	[Sealed] Deposition transcript of Nenad Medvidovic (May 17, 2021)
Exhibit 9	[Sealed] Deposition transcript of Nenad Medvidovic (May 18, 2021)

I.   SUMMARY OF THE ARGUMENT

Amazon is not entitled to summary judgment of non-infringement. First, several of

Amazon's arguments rely on re-litigating failed claim construction positions, which is

inappropriate at this stage of the case. Second, Amazon misstates or misconstrues many of IPA's

infringement theories to support its own theories. Third, disputes about Alexa's functionality are

purely factual in nature – the jury should be allowed to decide these issues after hearing from

both sides' experts. The Court should deny Amazon's Motion in its entirety.

II.   LEGAL STANDARDS

An infringement determination requires a two-step analysis. *See Markman v. Westview*

Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc). First, the Court must construe the

asserted claims, and then the trier of fact must compare the properly construed claims with the

accused infringing product. *See id.* at 976. The second step is a question of fact. *See PPG Indus.*

v. Guardian Indus. Corp., 156 F.3d 1351, 1355 (Fed. Cir. 1998).

"When an accused infringer moves for summary judgment of non-infringement, such

relief may be granted only if at least one limitation of the claim in question does not read on an

element of the accused product, either literally or under the doctrine of equivalents." *EMC Corp.*

v. Pure Storage, Inc., 154 F. Supp. 3d 81, 95 (D. Del. 2016). "Thus, summary judgment of non-

infringement can only be granted if, after viewing the alleged facts in the light most favorable to

the non-movant, there is no genuine issue of whether the accused device is encompassed by the

claims [as construed by the court]." *Id.* Disputes about how an accused product works are

quintessential factual disputes requiring trial. *See, e.g.*, *Hilgraeve Corp. v. Symantec Corp.*, 265

F.3d 1336, 1342-44 (Fed. Cir. 2001) (reversing summary judgment of non-infringement).

III. AMAZON IS NOT ENTITLED TO SUMMARY JUDGMENT OF NON-INFRINGEMENT

A. Alexa Infringes the "ICL" Limitation of the Asserted Patents

All the Asserted Claims disclose an "Interagent Communication Language," "inter-agent language," or "ICL."[1] The Court construed these terms to mean "an interface, communication, and task coordination language." (D.I. 128 at 2.) This construction comes directly from the specification of the Asserted Patents. (Ex. 1, 10:49-51.)[2] During claim construction, Amazon attempted to include the bolded elements: "A **common** interface, communication, and task coordination language used by agents, **regardless of what platform they run on or what computer language they are programmed in**" (D.I. 118 at 29.) The Court rejected Amazon's proposal, stating that Amazon sought to import preferred embodiments into the definition of "ICL." (D.I. 126 at 6.) Yet Amazon's arguments depend on this rejected claim construction argument – in particular, the inclusion of the word "common." Under the Court's actual construction, a reasonable jury could (and should) find that Alexa infringes the "ICL" limitations.

1. The Functionalities of ██████████ Together Comprise the "ICL" of the Asserted Patents

Amazon's Alexa uses the claimed ICL. The modeling capabilities and associated functionalities of ███

████████████████████████████████████[3] together map to the "ICL" of the Asserted Patents.[4] (Ex. A, ¶¶ 126-128, 137, 146, 151, 314, 413, 414, 513, 519); Ex. B, ¶¶ 33,

---

[1] IPA uses the term "ICL" herein to refer to all three of these claim terms.
[2] Exhibits labeled with numbers are exhibits to the Declaration of Min Wu in Support of Amazon's Motion for Summary Judgment of Non-Infringement. (D.I. 300.) All exhibits labeled with letters are attached as exhibits to the Declaration of Jaime Olin in support of this brief.
[3] ██
██████████████████ (Ex. D, 72:23-74:19.)
[4] Contrary to Amazon's insinuation, it is permissible (and commonplace) for a patentee to map a single claim limitation to more than one component in an accused device. *See, e.g., Voice Int'l, Inc. v.*

57, 61.) Dr. Medvidovic cites to the source code files that implement these formats and repeatedly affirms that the purpose of [REDACTED]

[REDACTED] ." (*See, e.g.*, Ex. A, ¶¶ 137, 146, 151.)

Specifically, [REDACTED] together meet each element of the Court's construction of "ICL" ("an interface, communication, and task coordination language").[5] The following is a non-exhaustive list of the relevant Alexa functionalities that correspond to each of these elements:[6]

Portion of Construction	Alexa Functionality
Interagent	[REDACTED] (Ex. A, ¶¶ 102-103; 105-111; Ex. B, ¶ 141.)
	[REDACTED] (Ex. A, ¶¶ 103-104.)
	[REDACTED] (*Id.*, ¶ 104.)
	[REDACTED] (*Id.*, ¶¶ 105-111.)
Interface	[REDACTED] . (*Id.*, ¶¶ 102-103, 126.)
Communication	[REDACTED] . (*Id.*, ¶¶ 103-104.)
	[REDACTED] (*Id.*, ¶¶ 104, 126; Ex. B, ¶ 157.)

Oppenheimer Cine Rentals, LLC, No. LACV15-08830 JAK, 2018 WL 3830030, at *5–6 (C.D. Cal. Jan. 18, 2018).

[5] As a side note, Amazon depicts the expression "ev_post_solve(Goals, Params)" as an example of ICL. (Mot. at 3.) It is actually an example of an event. (Ex. 1, 10:61-11:10.)

[6] Amazon argues that Dr. Medvidovic did not apply the Court's construction. (Mot. at 6 n. 4.) This is false. Throughout his reports, Dr. Medvidovic details Alexa's functionality as it relates to the interface, communication, and task coordination aspects of [REDACTED]

[REDACTED] (*See, e.g.*, Ex. A, ¶¶ 102-112, 126, 132, 134, 137-152); Ex. B), ¶¶ 27, 33, 48, 54-62).)

[7] [REDACTED] . (Ex. A (Medvidovic Op. Rep.), ¶ 116).)

3

Task Coordination	███████████████████████████████
	(Ex. A , ¶¶ 105, 126.)
Language	███████████████████████████████
	███████████ (Id., ¶¶ 126, 137, 146, 151.)

a. ████████████████ **are Formats, Not Languages. Together, They Comprise a Language.**

In computer science, a format reflects the way data is organized to enable the storage, access, and manipulation of certain information. (Medvidovic Decl., ¶ 13; *see also, e.g.*, Exs. H, K.) It differs from – but is related to – a language which, in this context, means a system of symbols and rules that specifies the information that can be represented and its meaning. (Medvidovic Decl., ¶ 14; *see also, e.g.*, Exs. I, K.) Amazon admits that ███████████████ ████████ (Mot. at 1, 2, 4, 6, 7.) Dr. Medvidovic never claims that either ██████████████ ████████████████████████████ . Instead, the ████████████████████ ██ ████████████████████████████ . ████████████████████████ ████████████████████████████████████ that maps to the ICL of the Asserted Patents. (Ex. A , ¶¶ 126-128, 137, 146, 151, 314, 413, 414, 513, 519.)

Put another way, ███████████████████████████████████████

██

██

██

██

██

██

Amazon argues that ██

██ (Mot. at 7.) This assertion is both

incorrect and irrelevant. ██████████████████████████████████

██. (Ex. A,

¶¶ 103-104.) Further, nothing in the Court's construction of "ICL" requires, or even suggests, that

a single component[8] must receive and understand every aspect of the language. In fact, the Court

rejected Amazon's attempt to import the word "common" into the construction. (D.I. 126, 6.)

Next, Amazon's purported analogy only confuses the issue. (Mot. at 7.) Despite having

admitted multiple times that ████████████████████, Amazon suddenly switches to

likening them to languages instead (████████████████████████████████).

Amazon then concludes that these supposed "languages" are not the same language, so Alexa

cannot infringe. But the analogy falls apart when █████████████████████████

██████ A more appropriate analogy is the Java computer language, which is comprised of

several different formats.[9] For example, a .java file contains human readable code (█████

█████████), which is compiled to produce the corresponding .class bytecode (████████

███████████). If there is no .java file, one cannot obtain the corresponding .class file –

███████████████████████████████ The .java file and the

corresponding .class file are formats that are indisputably part of the Java programming

language, ██████████████████████████. Further, it is inarguable that the

source-code format in .java files and the bytecode format in .class files, standing alone, are not

---

[8] Amazon seeks to control the determination of what qualifies as a particular "component" as opposed to a different "component." Under Amazon's framework, no software patent could ever be infringed because an accused infringer would draw the bounding box around whatever functionality assured non-infringement and claim those "components" are different from what is claimed in the asserted patent.

[9] ████████████████████████████████████ (Medvidovic Decl. ¶ 17.)

"languages" in the way Amazon attempts to characterize ███████████ (Medvidovic Decl.,

¶ 16; *see also, e.g*, Ex. E.)

Neither party asked the Court to construe the term "language," which was appropriate

given that "language" will be a simple term for the jury to understand. *See Phillips v. AWH Corp.*,

415 F.3d 1303, 1314 (Fed. Cir. 2005). Thus, while Amazon argues that "███████████████

██"

(Mot. at 6), that is simply Amazon's non-infringement theory based on its rejected claim

construction position. Under IPA's infringement theory, as explained above, ███████████

██

███████████████████████████████████[10] Accordingly, the jury, when

given the Court's construction of "ICL" (and not Amazon's rejected proposed construction),

should determine whether to believe IPA or Amazon's expert at trial. *See, e.g.*, *Inventio AG v.*

ThyssenKrupp Elevator Corp., Civil Action No. 08-00874-RGA, 2014 WL 468897, at *4 (D.

Del. Feb. 3, 2014) ("The Court has not been asked to the construe the term 'connected' … and

does not choose to do so now. It is a question of fact for the jury as to whether or not the two

components are connected in a way sufficient to meet the claim term.").

> **b.** ███████ **Properly Corresponds to the "Layer of Conversational Protocol"**
> **and** ████ **to a "Service Request Expressed in ICL"**

Amazon contends that, because Dr. Medvidovic pointed to ███████ as mapping to the

"layer of conversational protocol" in the Asserted Patents and ████ to the "service request

expressed in ICL," this somehow means IPA has not shown that Alexa includes an ICL. (Mot. at

7.) But Amazon once again ignores the basis of IPA's infringement theory, which is that ███████

---

[10] IPA's infringement theory is consistent with numerous examples in the computer science literature,
including the industry-standard Unified Modeling Language (UML), which comprises fourteen different
formats (called "diagram types") integrated into a single language. (Medvidovic Decl., ¶ 18; Ex. F.)

███████████████████████████████ Based on that understanding, IPA can map each of these formats to different portions of the ICL. This is not, as Amazon contends, calling "everything under the sun" a part of ICL. (Mot. at 8.) Instead, ████████████████████████████ as the formats that comprise the ICL. To the extent Amazon disagrees, that presents a fact issue for the jury.

c. Alexa Infringes the "Service Request" Limitation

Amazon also claims that IPA cannot show that Alexa meets the "request for service" or "service request" limitations of the Asserted Claims. (Mot. at 8.) Amazon is wrong. ████████ ██████████████████████████████████, corresponds to the "service request" of the Asserted Claims. (Ex. A, ¶¶ 209-211; Ex. 9, 21:20-26:12.)

First, Amazon argues that "[t]here cannot be service requests expressed in ICL, because there is no ICL in Alexa. . . ." (Mot. at 8.) This argument fails based on IPA's infringement theory described above or, at the very least, presents a factual dispute for the jury to decide.

Second, Amazon contends that if IPA points to ████ as the ICL service request, then ██████ must meet *all* the requirements of ICL. (*Id.*) This is an unwarranted stretch. Asserted Claim 10 of the '115 Patent discloses "receiving a request for service as a base goal in the inter-agent language." In Alexa, the "request for service" is the ████████████████████████████ ████████████████████████ The claim does not require that the "request for service" contain *every* component of ICL, only what is needed to represent the request. For example, if a programmer wants to describe a system's structural design in UML, that can be done by using only one of the fourteen UML class diagrams. (Medvidovic Decl. ¶ 18; Ex. F.)

Similarly, Asserted Claim 29 of the '115 Patent and Asserted Claim 50 of the '560 Patent do not require the service request to adhere to *every* aspect of ICL. In fact, the service request does adhere to ICL, because it adheres to the ████████████████. (Ex. B, ¶ 121; Ex. 9, 29:19-

30:13.) And Asserted Claim 26 of the '560 Patent does not indicate that every aspect of ICL must

be present in forming the service request – only those aspects required to do so.

<div align="center">****</div>

According to Dr. Medvidovic, the combination of ███████████████ comprises an

interface, communication, and task coordination language. (Ex. A, ¶¶ 126-128, 137, 146, 151,

314, 413, 414, 513, 519.) Dr. Sycara disagrees. (Ex. C, ¶¶ 127-128.) This dispute presents issues

of fact, not law. Given the Court's construction (and not Amazon's rejected proposal), a

reasonable jury could (and should) agree with Dr. Medvidovic and IPA. *See, e.g.*, *TC Tech. LLC*

v. Sprint Corp., 379 F. Supp. 3d 305, 314 (D. Del. 2019) ("The parties do not dispute the

meaning of 'central location,' but whether certain parts of Sprint's LTE network meet the

limitation. . . [W]hether an individual base station sector in Sprint's LTE network can be

considered a 'central location' such that it meets the 'mutually exclusive' limitation is a disputed

question of fact."); *see also EMC Corp.*, 154 F. Supp. 3d at 96; *AVM Techs., LLC v. Intel Corp.*,

Civil Action No. 15-33-RGA, 2017 WL 1536389, at *2 (D. Del. Apr. 27, 2017); *Sprint Comm'ns*

Co. L.P. v. Comcast IP Holdings, LLC, Civil Action No. 12-1013-RGA, 2015 WL 452289, at *2

(D. Del. Jan. 30, 2015); *Wonderland Switzerland AG v. Evenflo Co. Inc.*, Civil Action No. 18-

1990-RGA, 2021 WL 39540, at *7-8 (D. Del. Jan. 5, 2021).

B. Alexa Includes a "Layer of Conversational Protocol" and "Event Types"

1. Alexa Infringes the "Layer of Conversational Protocol" Limitation

Both ██

███████████████████████████████████████. The ████████████████████

██

██████ (Ex. A, ¶¶ 153-185; Ex. B, ¶ 63.) ████████████████████████████

██

<div align="center">8</div>

██

██

██

███████████████████████████

Dr. Medvidovic explains that the "rules" in the Court's construction of "layer of conversational protocol" correspond to "████████████████████████████████████ ████████████████████████████████████." (Ex. A, ¶ 154.) He describes the "data structures" within Alexa as ████████████████████████████████████ ████████████████████████████ (Id., ¶ 155.) In the Alexa source code, the

██

█████████████████████ (Id., ¶ 160.) Dr. Medvidovic walks through the Alexa source code to show how it reveals an ICL that includes the layer of conversational protocol. (Id., ¶¶ 160-185.)

For example, as explained above, the ████████████████████████████████████

██.

██

██████████████████████ "Structure," in this context, means the standard structure or format of the constructs or data structures that are used for communication – i.e., ████████████████

█████ (Medvidovic Decl. ¶ 20; Ex. A, ¶ 154.) ████████████████████████████████

██

████████████████████████████ (Ex. A, ¶¶ 153-185; Ex. B, ¶ 63.)

Amazon argues that the ██

██. (Mot. at 9.) ████████████████

██

9

[REDACTED]

[REDACTED] (Ex. A, ¶¶ 193-201.)

IPA's infringement mapping does not amount to conflating the two layers. (Mot. at 9-10.)

It is not uncommon for a single component to perform two different functions in software.[11]

Therefore, it is not unusual, or even surprising, that [REDACTED]

[REDACTED]

2. Amazon's Argument About "Event Types" Relies on Misstating the Court's Construction and Misreading IPA's Infringement Theory

First, the parties' agreed-upon construction of "event type(s)" (which the Court adopted) is "type of event" – not "type**s** of event**s**," or even "type**s** of event." (D.I. 128, 3.) If Amazon did not agree with this construction, it could have submitted "event type(s)" as a disputed term to the Court. Amazon did not and now seeks to backtrack from the agreed construction. At first glance, turning "type of event" into "types of events" may seem like a minor change, but the pluralization enables Amazon to offer the brand-new argument that "'event type**s**' must specify *different* message types." (Mot. at 10.)[12] The Court should disregard this argument since it relies on Amazon's misstatement of the Court's claim construction and/or is an attempt to interpose its

---

[11] For example, every XML element in source code contains structure (embodied in the class attributes), and content (the values those attributes take at runtime). (Medvidovic Decl. ¶ 19; Ex. G, Sec. 3.)

[12] This opinion is not in Dr. Sycara's rebuttal report and, therefore, should not be allowed at trial. *See* Fed. R. Civ. P. 26(a)(2); 37(c)(1); *Inline Connection Corp. v. AOL Time Warner Inc.*, 472 F. Supp. 2d 604, 613-15 (D. Del. 2007) (precluding expert from testifying on matters not contained in his expert report).

own construction. *See, e.g.*, *EMC Corp.*, 154 F. Supp. 3d at 99 ("No party may contradict the court's construction to a jury.").

Second, using its new construction, Amazon argues that the "event types" of the Asserted Claims must specify different message types and that Dr. Medvidovic only identifies one event type. (Mot. at 10.) This argument misreads IPA's infringement theory. IPA does not contend that Alexa only contains one event type. Dr. Medvidovic ██████████████████████████████████████ ██.[13] (Ex. A, ¶¶ 156, 160, 170, 180.) He explains that the ██████████████████████████████████████

██

██

██████████████████████████████████████ (*Id.*, ¶¶ 156, 160, 170, 180; Ex. B, ¶ 64.) ██████████████████████████████████

██.[14]

Furthermore, the Asserted Claims do not require that a single event have more than one type.[15]

██

██

██████████████████████████████ (Ex. A, ¶¶ 161, 171, 181.) As shown in the source code files referenced by Dr. Medvidovic (*Id.*, fns. 288, 289, 293, 297; *id.*,

---

[13] A runtime instance of an object specifies the state of the object or the content contained within the object at a particular point in time in response to a particular input. (Medvidovic Decl. ¶ 21.)
[14] Immutable entities in a computer program are represented as constants because, among other reasons, they need to prevent being accidentally modified by other parts of the program. (Medvidovic Decl. ¶ 22.)
[15] Even if IPA alleged that Alexa contained only one event type, the Federal Circuit has pointed out that "in context, the plural can describe a universe ranging from one to some higher number, rather than requiring more than one item." *Versa Corp. v. Ag-Bag Int'l Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004).

Ex. C (claim chart) at 79, 80, 277) ██████████████████████████████████████

████████████

C. Amazon Infringes the "Arbitrarily Complex Goal Expression" and "Compound Goal" Limitations

Asserted Claim 10 of the '115 Patent requires "receiving a request for service as a base goal in the inter-agent language, in the form of an arbitrarily complex goal expression." Contrary to Amazon's contention, an arbitrarily complex base goal is an **option**, but **not required**, in Asserted Claims 29, 34, 35, and 28 of the '115 Patent ("interpreting a service request in order to determine a base goal that **may be** a compound, arbitrarily complex base goal"). The Court adopted the parties' agreed-upon construction of "arbitrarily complex goal expression"/"arbitrarily complex base goal"/"arbitrarily complex goal"[16] to mean "a single goal expression expressed in a language or syntax that allows multiple sub-goals and potentially includes more than one type of logical connector (e.g., AND, OR, NOT), and/or more than one level of logical nesting (e.g., use of parentheses), or the substantive equivalent." (D.I. 128, 2-3.) The Asserted Claims of the '560 Patent do not include this term.[17]

1. Amazon's Argument Relies on Reading the Word "Potentially" Out of the Court's Construction for "Arbitrarily Complex Goal Expression"

Once again, Amazon relies on a rewriting of the claim construction it agreed to – in this case, reading the word "potentially" out of the Court's construction. Amazon's position requires that the language or syntax **must** be capable of expressing at least two logical connectors, two levels of logical nesting, or the equivalent. (Mot. at 11.) Under Amazon's interpretation, the word "potentially" is rendered superfluous, resulting in an unacceptable construction. *See Power*

---

[16] IPA uses the term "arbitrarily complex goal expression" herein to refer to all three of these claim terms.
[17] The Court also adopted the parties' agreed-upon construction of "compound goal"/"complex goal," which does appear in Asserted Claim 28 of the '560 Patent (but not Asserted Claim 50), to mean "a single-goal expression comprising multiple sub-goals." (D.I. 128, 2.)

Mosfet Techs., LLC v. Siemens AG, 378 F.3d 1396, 1410 (Fed. Cir. 2004) ("[I]nterpretations that render some portion of the claim language superfluous are disfavored."). And, as an adverb, "potentially" is a modifier that must relate to something – in this construction, it relates to the clause it precedes. (Medvidovic Decl. ¶ 23.; Ex. B, ¶ 72; Ex. 8, 31:4-40:7.)

Amazon then inexplicably argues that if the language or syntax need not be capable of expressing at least two logical connectors, two levels of logical nesting, or the equivalent, "the part of the construction after 'potentially' would be rendered meaningless." (Mot. at 11.) But IPA does not dispute that the portion of the Court's construction after "potentially" is meaningful. It is also true, however, that that portion is optional, because of the inclusion of the word "potentially." "Meaningful" and "optional" are not mutually exclusive concepts.

Because Amazon's non-infringement theory is based on a new, incorrect construction, the Court should reject it. *See, e.g., Robocast, Inc. v. Apple Inc.*, 39 F. Supp. 3d 552, 562-63 (D. Del. 2014) (denying summary judgment where the accused infringer's interpretation of the Court's claim construction read out a key word from the limitation); *see also Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1224 n.2 (Fed. Cir. 2006); *Semcon Tech, LLC v. Micron Tech., Inc.*, Civil Action No. 12-532-RGA, 2017 WL 2591945, at *8 (D. Del. June 15, 2017). At the very least, since the parties' experts disagree on how the limitation is satisfied, this presents a factual dispute for trial. *See, e.g., Robocast, Inc. v. Apple Inc.*, 39 F. Supp. 3d 552, 562 (D. Del. 2014).

2. Under the Court's Construction, Alexa Infringes the "Arbitrarily Complex Goal Expression" Limitation

A "service request," as used in the Asserted Claims, refers to the base goal – the ultimate task the user wants to accomplish. In Alexa, the service request is represented in ███. (Ex. A, ¶ 204.) ██

██

████████ (*Id.*, ¶¶ 205-207.) While each of these processes may require separate steps, all are

taken in fulfillment of the user's ultimate goal – the service request.

██

██

██

██

██

██

██

██

██

████████████████████████████████████ The Asserted Claims do

not require this and Amazon provides no support for this conclusory contention. ████████████

██ In Alexa, they are,

and that is also what is required by the Asserted Claims.[18]

██

██

██

████████████ The Asserted Claims of the '115 Patent disclose "receiving" or "interpreting"

---

[18] Amazon takes issue with Dr. Medvidovic's citation to a document that contains the word "obsolete" on the title page. (Mot. at 12 n. 6.) But Dr. Medvidovic only uses this document to provide a use case, or example, of Alexa's functionality. (Ex. B, ¶ 82; (Ex. A, ¶¶ 223-225, 228-230.) In addition, the word "obsolete" on a document does not indicate that everything depicted in the document is obsolete, and the document itself does not express otherwise. (Ex. 9, 166:9-167:16.)

a service request that is (claim 10) or may be (claim 29, 34, 35, 38) in the form of an arbitrarily complex goal expression. Thus, for example, reading Asserted Claim 10 of the '115 Patent with the Court's claim constructions substituted for the relevant claim terms yields: "receiving a request for service as a [starting goal] . . . in the form of a [single goal expression . . .]." A "single goal expression" means an expression representing a single goal (i.e., service request). (Medvidovic Decl. ¶ 24.) It does not mean a single expression of a goal, which is what Amazon contends. (*Id.*) Under the correct interpretation, the "single goal expression" refers to the request for service and, ███

Amazon next contends that the Court's construction of "arbitrarily complex goal expression" requires that the language or syntax have built-in support for logical connectors, logical nesting, or the substantive equivalent. (Mot. at 13.) But that is not what the construction says. As explained above, the language or syntax of the arbitrarily complex goal expression **must** allow for multiple sub-goals. It can **potentially** include more than one type of logical connector, logical nesting, or the substantive equivalent. Furthermore, ████████████████████

██

████████████████████████████████ (Medvidovic Decl. ¶ 25 Ex. A, ¶ 207.) T██

██

██

██

██

████████████████████████████ As shown above, and as Amazon does not dispute, they do.

███

██

██

██

██

██

██

██

██

██

██

██

██

██████████████████████████████████████

██

██

██

████████████ But Amazon once again attempts to read the word "potentially" out of the Court's construction of "arbitrarily complex goal expression" to require not only that the expression must include a logical connector, but that it **must** include **more than one type of connector**. As detailed above, this interpretation would render an important aspect of the Court's construction meaningless and cannot be correct.

D. Alexa Infringes the "Agent Registry" Limitation

The Court gave the term "agent registry" its plain and ordinary meaning. (D.I. 128, 2.)

16

Amazon contends that Dr. Medvidovic "takes a scattershot approach to argue that Alexa meets the agent registry limitation," implying that his ████████████████████████████ was somehow improper. (Mot. at 15.) As discussed above for "ICL," mapping a limitation to more than one component in an accused product is wholly appropriate. *See Voice Int'l, Inc.*, 2018 WL at *5-6; (Ex. B, ¶ 46.) Further, in computer science, a "registry" is understood to have subparts and levels. (Medvidovic Decl. ¶ 15; *see also, e.g.*, Ex. J.) It is therefore not surprising that ████████████████████████████████████ All of Amazon's non-infringement arguments regarding "agent registry" contain genuine disputes of material fact for the jury. *See, e.g., M2M Solutions LLC v. Motorola Solutions, Inc.*, Civil Action No. 12-33-RGA, 2016 WL 70814, at *11-12 (D. Del. Jan. 6, 2016).

      a. ████████████████████████████████████
████████████████████████ **Comprise Part of the Claimed "Agent Registry"**

██

██

██ (Mot. at 15.) This description minimizes and misrepresents what these registries actually do. ████

██

██

██

██

██

██

██ (*Id.*, ¶

132.)[19]

Further, Dr. Sycara did not review the relevant source code files, some of which show

instances of ████████████████████████████. Instead, she claimed these source

code files were missing, even after Dr. Medvidovic proved their existence in his reply report and

deposition. (Ex. C, ¶ 227; Ex. B, ¶¶ 25-26; Ex. 9, 105:20-132:20.) And Dr. Medvidovic points to

███████████████████████████ (Ex. A, ¶¶ 132, 135, 145.)

Amazon also takes issue with Dr. Medvidovic's opinion that ███████████

██

██

██

██

██

████████████████████████████

        b.   ████████████████████████████████

██

██

██

██

██

---

[19] Amazon's reliance on Figure 7 of the Asserted Patents to show the claims require registration of "Capability Declarations" fails because Figure 7 is a single embodiment of the invention. *See* Ex. 1, 16:47-17:2; *TQ Delta, LLC v. Adtran, Inc.*, Civil Action No. 14-954-RGA, 2020 WL 4335781, at *3 (D. Del. July 28, 2020) ("'[W]e do not read limitations from the embodiments in the specification into the claims'").

██

██

██

██

██ (Ex. B, ¶¶ 48-53.)

It is difficult to imagine what constitutes a capability under Amazon's definition if the

aforementioned do not qualify, and Amazon offers no examples.[20]

Though Amazon claims that the ████████████████████████████████

██

██

██

██

██

██

Finally, Amazon's argument about Asserted Claim 50's "synchronized agent registries"

falls short. IPA is not claiming that, for example, the ████████████████████████

████████████████ Instead, IPA's infringement position is that ████████████████

██ (Ex. A, ¶¶ 515-516; Ex. B, ¶¶

181, 183.)

      c.   Alexa Registers Agent Capabilities Using ICL

---

[20] In addition, Amazon completely ignores the relevance of another Alexa component, ████████

██

██

████████████████████████████████████

As Amazon admits, only one of the Asserted Claims (claim 10 of the '115 Patent) discloses registering agent capabilities using an ICL. Within Alexa, ███████████ ██████ (Medvidovic Decl. ¶ 27; Ex. B, ¶ 49.) As in the example above, ███████████

██

██

██

██

██

████████████████████████████████ (Ex. A, ¶ 132; Ex. 9, 98:2-105:19; 153:15-156:14; Ex. B, ¶¶ 48, 54.) The parties' disagreement regarding how Alexa functions is, at the very least, a fact issue for the jury.

d.   Alexa Registers Trigger Declarations

Amazon's contention that Dr. Medvidovic failed to identify any trigger declarations █ ████████████████████████████████████ is incorrect. For example, Dr. Medvidovic discusses ██ (Ex. A, ¶ 190.) He walks through the Alexa source code to demonstrate how this trigger is invoked. (*Id.*, ¶¶ 194, 197, 200.) ███████████████████████████████████████

██

████████ (Medvidovic Decl. ¶ 28.)

IV.   CONCLUSION

Because significant portions of Amazon's Motion relies on re-litigating the Court's claim constructions, and the rest discloses factual disputes between the parties' experts, the Court should deny Amazon's Motion and allow IPA's infringement case to proceed to the jury.

Dated: July 30, 2021

Of Counsel:

Paul J. Skiermont
Sarah E. Spires
Steven W. Hartsell
Jaime K. Olin
Alexander E. Gasser
Sheetal Patel
Kevin P. Potere
Tara M. Williams
SKIERMONT DERBY LLP
1601 Elm Street, Suite 4400
Dallas, TX 75201
(214) 978-6600
IPA_SDTeam@skiermontderby.com

Mieke K. Malmberg
SKIERMONT DERBY LLP
800 Wilshire Blvd., Suite 1450
Los Angeles, CA 90017
(213) 788-4500
IPA_SDTeam@skiermontderby.com

BAYARD, P.A.

/s/ Stephen B. Brauerman
Stephen B. Brauerman (#4952)
Ronald P. Golden III (#6254)
600 North King Street, Suite 400
Wilmington, DE 19801
(302) 655-5000
sbrauerman@bayardlaw.com
rgolden@bayardlaw.com

Attorneys for Plaintiff,
IPA Technologies Inc.

21

<u>CERTIFICATE OF SERVICE</u>

I hereby certify that on July 30, 2021, a true and correct copy of the foregoing has been

served upon the following parties via electronic mail.

J. David Hadden
dhadden@fenwick.com
Saina S. Shamilov
sshamilov@fenwick.com
Ravi Ranganath
rranganath@fenwick.com
Todd Gregorian
tgregorian@fenwick.com
Sapna S. Mehta
smehta@fenwick.com

Steven J. Balick
sbalick@ashby-geddes.com
Andrew C. Mayo
amayo@ashby-geddes.com

<div align="right">

/s/ Stephen B. Brauerman
Stephen B. Brauerman (No. 4952)

</div>